Remarks:

In the Office Action dated July 14, 2005, claims 44-51 and 53-64, in the above-identified U.S. patent application were rejected. Reconsideration of the rejections is respectfully requested in view of the above amendments and the following remarks. Claims 44-51 and 55-64 remain in this application and claims 1-43, and 52-54 have been canceled.

The specification was objected to and claims 55 and 60 were rejected under 35 USC §112, first paragraph, as including new matter. Though applicants respectfully disagree, claims 55 and 60 have been amended deleting references to "$GTP_{\gamma}S$ binding" in order to advance the prosecution of the present application. In view of these amendments applicants request that this objection and rejection be withdrawn.

Claims 53-64 were rejected under 35 USC §112, second paragraph, as indefinite. Claims 53 and 54 have been canceled and claims 55 and 60 have been amended to delete the limitation regarding "modulation of cellular cyclic AMP levels" and to indicate that the "response measured in step (c) is selected from the group consisting of".. Regarding the remaining claims, applicants respectfully point out that example 15B clearly shows how to determine whether or not a compound is an agonist. Example 15B measures an NFκB response, but other readouts (SRE, AP-1) would be measured in an analogous fashion. The explanation below table 2 (under "Results") interprets the data shown in the table. The value "Emax" shows whether a compound is an agonist or not (with 100% being full efficacy) – the values for S1P and SPC are close enough to

100% that they are classed as full agonists. Dihydro-S1P is classed as a partial agonist, since the Emax value is only 49.2% (i.e. this compound is only half as efficacious as SPC). The other 2 compounds have poor efficacy (though they are active in the assay). The EC50 value shows how potent the compounds are, in other words the compound required to give half (50%) of the maximum effect seen in the assay (thus, for SIP, a concentration of 0.32 μM would show an efficacy of 43.35% (half of the Emax).

Regarding antagonists, measuring antagonism would also have been known to one skilled in the art given that an agonist assay has been taught. An antagonist blocks the response of an agonist and thus standard practice would be to incubate with the putative antagonist and then measure the response using an agonist (for example, if you incubated with a putative agonist and then added 0.88 μM SPC you would expect to see a response of 100%). In the presence of an antagonist the response would be at least partially, if not completely, blocked. In view of the above discussion, amendments and the disclosure in the present application, applicants contend that the claims are not indefinite and request that this rejection be withdrawn.

Claims 55 and 60 were rejected under 35 USC §112, first paragraph, as lacking an adequate written description regarding the language "modulation of cellular cyclic AMP". Claims 55 and 60 have been amended deleting this language. In view of these amendments applicants request that this rejection be withdrawn.

Applicants respectfully submit that all of claims 44-51 and 55-64 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

By 

Monica Chin Kitts
Attorney for Applicants
Registration No. 36,105
ROTHWELL, FIGG, ERNST & MANBECK, p.c.
Suite 800, 1425 K Street, N.W.
Washington, D.C. 20005
Telephone: (202)783-6040